

Lithium Battery Tab Configuration List

Lithium

International English

NOTICE TO READERS

It is the responsibility of each user to ensure that each battery application system is adequately designed safe and compatible with all conditions encountered during use, and in conformance with existing standards and requirements. Any circuits contained herein are illustrative only and each user must ensure that each circuit is safe and otherwise completely appropriate for the desired application.

This literature contains information concerning cells and batteries manufactured by Matsushita Battery Industrial Co., Ltd. This information is generally descriptive only and is not intended to make or imply any representation guarantee or warranty with respect to any cells and batteries. Cell and battery designs are subject to modification without notice. All descriptions and warranties are solely as contained in formal offers to sell or quotations made by Matsushita Battery Industrial Co., Ltd., Panasonic Sales Companies and Panasonic Agencies.

1. Cylindrical Type Lithium Batteries P.3-P.5

Dimensions

2. Coin Type Lithium Batteries P.7-P.21

Poly-carbonmonofluoride(BR) Series Dimentions

Manganese Dioxide(CR) Series Dimentions

High Operating Temperature Poly-carbonmonofluoride(BR-A) Series
Dimensions

3. Vanadium Lithium Rechargeable Batteries(VL series) P.23-P.27

Dimensions

4. Manganese Lithium Rechargeable Batteries(ML series) P.29-P.33

Dimensions

<Notes>

(1) This handbook sets forth the tab configurations of lithium batteries. Details of product prices, delivery lead time and other transaction conditions will be determined through discussions to be held separately.

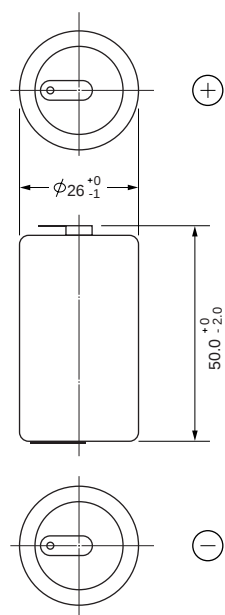
(2) The contents of this handbook are subject to change without notice due to improvements or discontinuation. Before studying the use of the lithium batteries described in this handbook in your products, check with Matsushita Battery Industrial Co., Ltd. Industrial/Systems Sales & Marketing Division for their availabilities ahead of time.

(3) With lithium batteries, different product number suffixes are used for different destinations. Inquire separately for details.

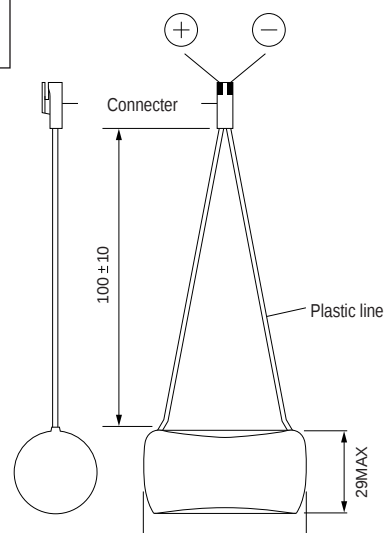
■Cylindrical Type Lithium Batteries

Bare cell	Model Number	Specifications		Tab configuration	Page/Fig No.
		Nominal Voltage(V)	Nominal Capacity(mAh)		
BR-C	BR-CT2P	3	5,000	Tab (12mm)	4 /No.1
	BR-CC7P	3	5,000	Connector	4 /No.2
BR-A	BR-AT2P	3	1,800	Tab (12mm)	4 /No.3
	BR-AE2P	3	1,800	Tab pin	4 /No.4
BR-2/3A	BR-2/3AT2P	3	1,200	Tab (12mm)	5 /No.5
	BR-2/3AE2P	3	1,200	Tab pin	5 /No.6
	BR-2/3AC2P	3	1,200	Connector	5 /No.7
BR-2/3A	BR-E3C3C	6	1,200	Connector	5 /No.8
	BR-P2P	6	1,200	—	5 /No.9

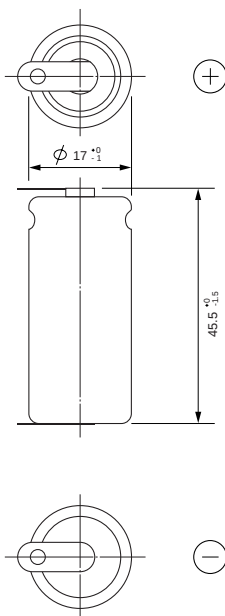
BR-CT2P
Fig No.1



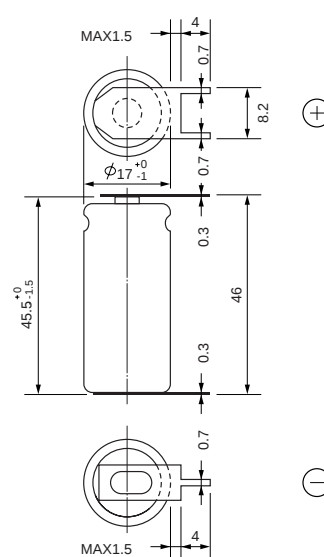
BR-CC7P
Fig No.2



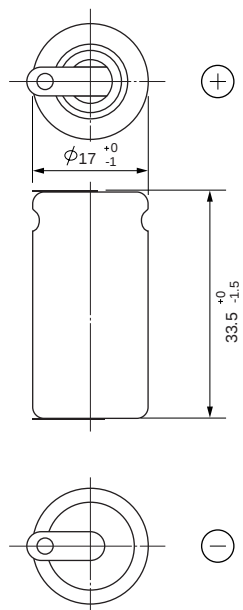
BR-AT2P
Fig No.3



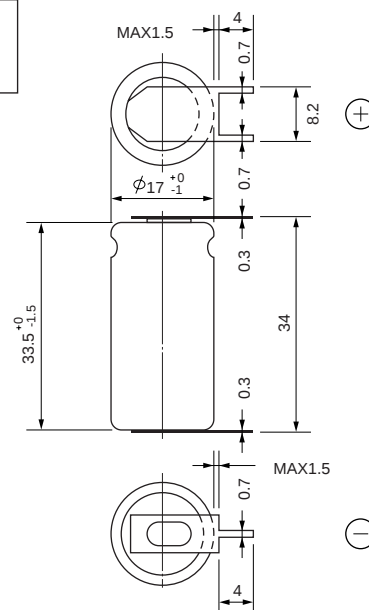
BR-AE2P
Fig No.4



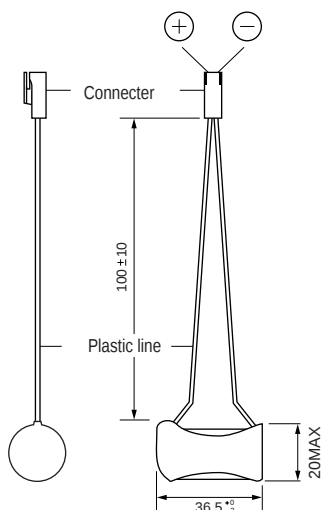
BR-2/3AT2P
Fig No.5



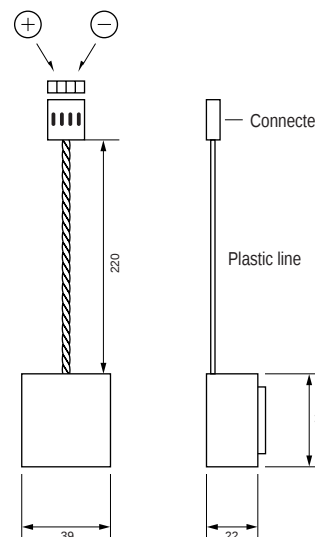
BR-2/3AE2P
Fig No.6



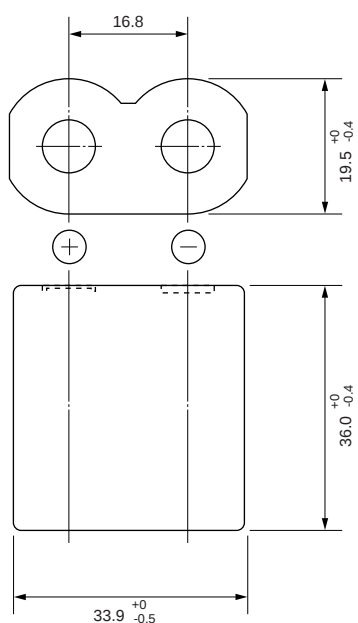
BR-2/3AC2P
Fig No.7



BR-E3C3C
Fig No.8



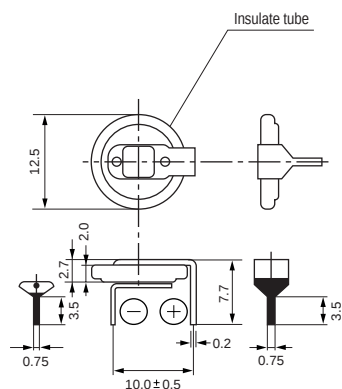
BR-P2P
Fig No.9



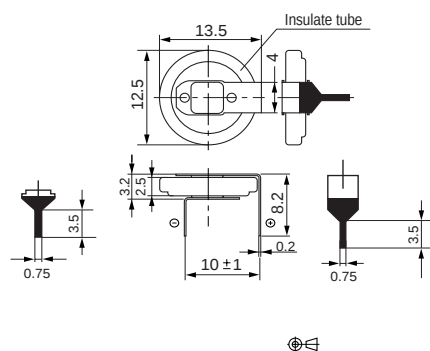
■Coin Type Lithium Batteries (Poly-carbonmonofluoride(BR) series/Manganese Dioxide (CR) series)

Type	Model Number		Insulate tube With / Without		Specifications		Page/Fig No.
					Nominal Voltage(V)	Nominal Capacity(mAh)	
H	BR1220	CR1220	/1HF	/1HE	3	35	8/No.10
	BR1225		/H1A	/H9A	3	48	8/No.11
	BR1632	CR1632	/1HF	/1HE	3	BR 120 CR 125	8/No.12
		CR2025	/1HF		3	165	8/No.13
	BR2032	CR2032	/1HF	/1HE	3	BR 190 CR 220	8/No.14
	BR2325		/1HC	/1HB	3	165	8/No.15
	BR2330	CR2330	/1HF	/1HE	3	BR 255 CR 265	9/No.16
		CR2354	/1HF	/1HE	3	560	9/No.17
		CR2477	/1HF	/1HE	3	1,000	9/No.18
V	BR1220	CR1220	/1VC	/1VB	3	35	10/No.19
	BR1225		/1VC	/1VB	3	48	10/No.20
	BR1632	CR1632	/V1A		3	BR 120 CR 125	10/No.21
		CR2025	/1VC		3	165	10/No.22
	BR2032	CR2032	/1VC	/1VB	3	BR 190 CR 220	10/No.23
	BR2325		/1VC	/1VB	3	165	10/No.24
	BR2330	CR2330	/1VC	/1VB	3	BR 255 CR 265	11/No.25
		CR2354	/1VC	/1VB	3	560	11/No.26
		CR2477	/1VC	/1VB	3	1,000	11/No.27
F		CR1216		/1F5U	3	25	12/No.28
		CR1220	/1FC		3	35	12/No.29
	BR1225		/F1A		3	48	12/No.30
		CR1616		/1F2	3	55	12/No.31
	BR1632	CR1632	/1F2		3	BR 120 CR 125	12/No.32
	BR2016	CR2016	/1F2		3	BR 75 CR 90	12/No.33
		CR2025	/1F2		3	165	13/No.34
	BR2032	CR2032	/1F2		3	BR 190 CR 220	13/No.35
	BR2330	CR2330	/1F3		3	BR 255 CR 265	13/No.36
		CR2354	/1F2		3	560	13/No.37
		CR2477	/1F2		3	1,000	13/No.38
	BR3032	CR3032	/1F2		3	500	13/No.39
G		CR2025	/1GVF		3	165	14/No.40
	BR2032	CR2032	/1GVF	/1GV	3	BR 190 CR 220	14/No.41
	BR2032	CR2032		/1GS	3	BR 190 CR 220	14/No.42
	BR2032	CR2032	/1GUF	/1GU	3	BR 190 CR 220	14/No.43
	BR2330	CR2330	/1GVF	/1GV	3	BR 255 CR 265	14/No.44
	BR2330	CR2330	/1GUF	/1GU	3	BR 255 CR 265	14/No.45
		CR2354	/G1A		3	560	15/No.46
		CR2354	/1GUF	/1GU	3	560	15/No.47
		CR2477	/1GVF	/1GV	3	1,000	15/No.48
	BR3032	CR3032	/1GUF		3	500	15/No.49
Others	BR2016	CR2016	/1T2		3	BR 75 CR 90	16/No.50
		CR2025	/1T2		3	165	16/No.51
	BR2032	CR2032	/1T2		3	BR 190 CR 220	16/No.52
	BR2330	CR2330	/1T3		3	BR 255 CR 265	16/No.53

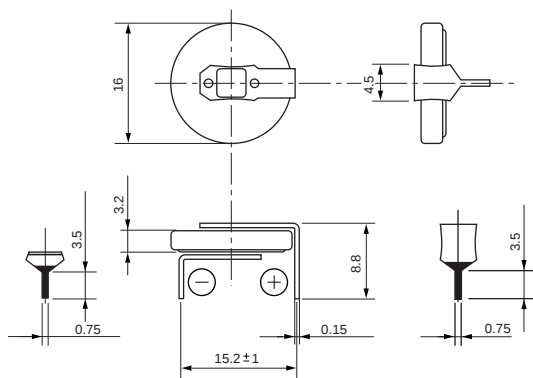
BR,CR1220
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Fig No.10



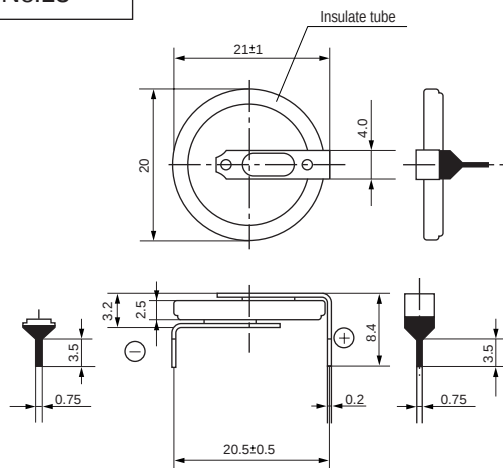
BR1225
/H1A/H9A
Fig No.11



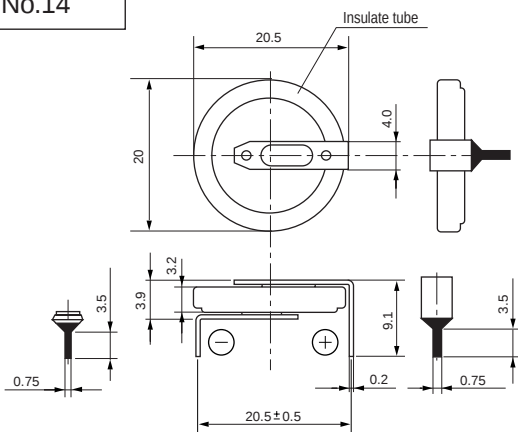
BR,CR1632
/1HF/1HE
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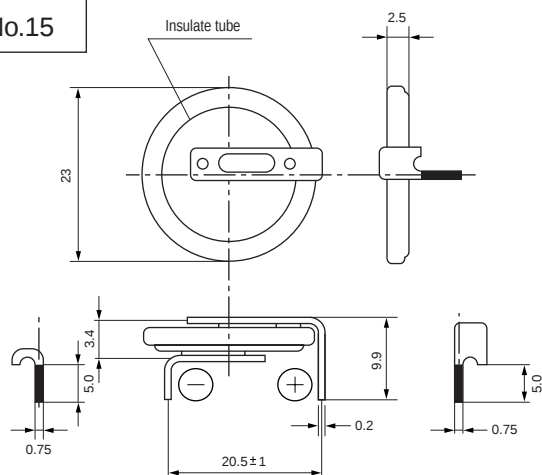
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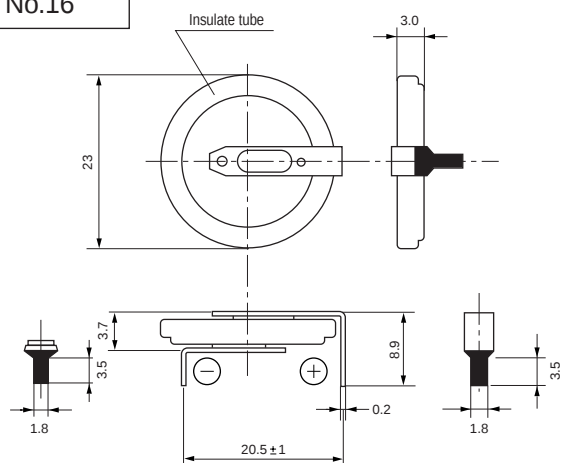
BR,CR2032
/1HF/1HE
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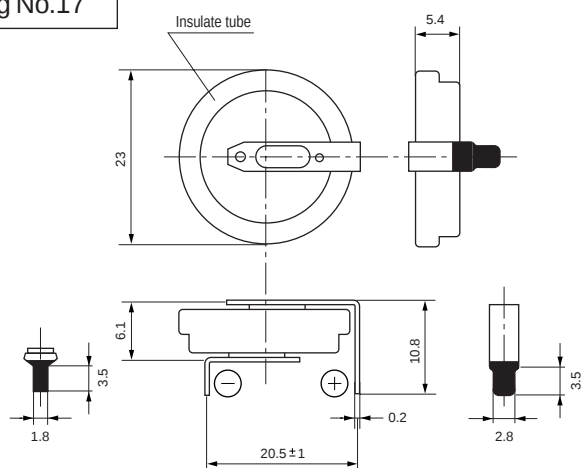
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/1HC/1HB
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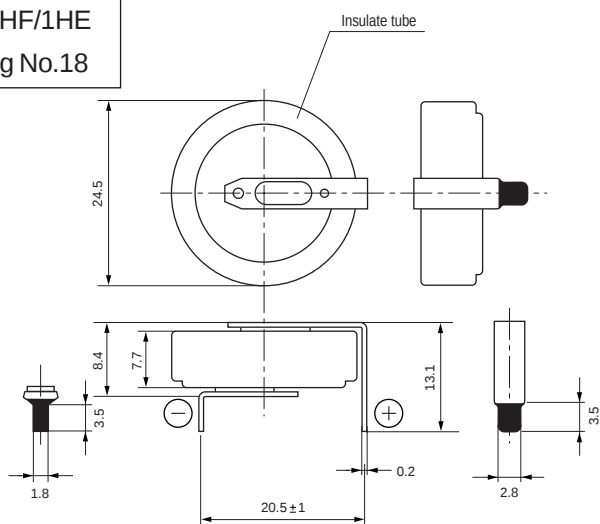
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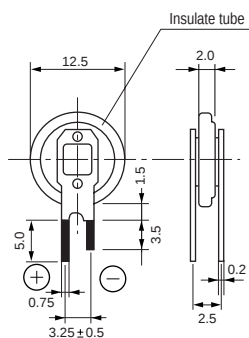
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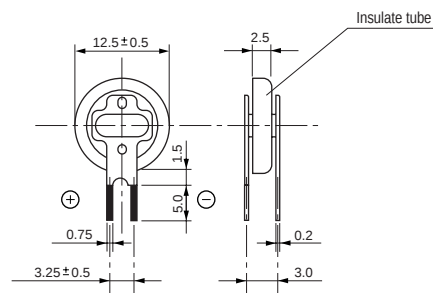
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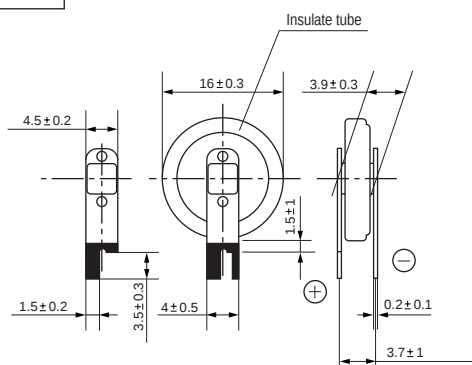
BR,CR1220
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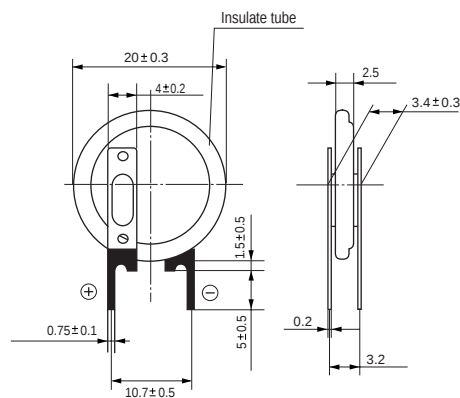
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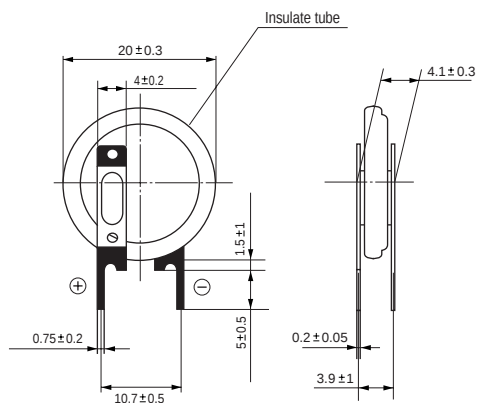
BR,CR1632
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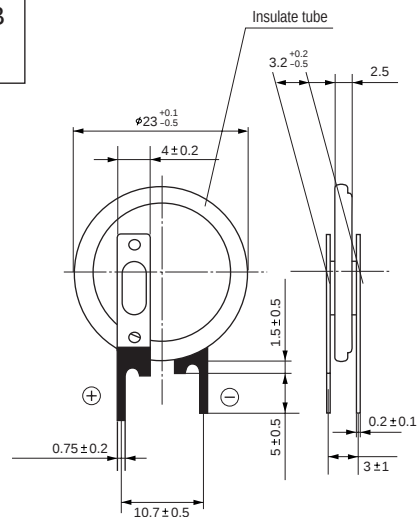
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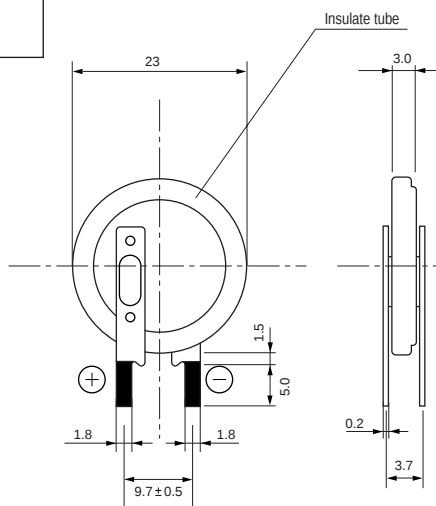
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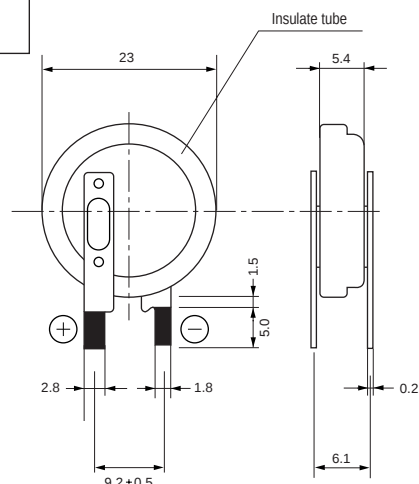
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/1VC/1VB
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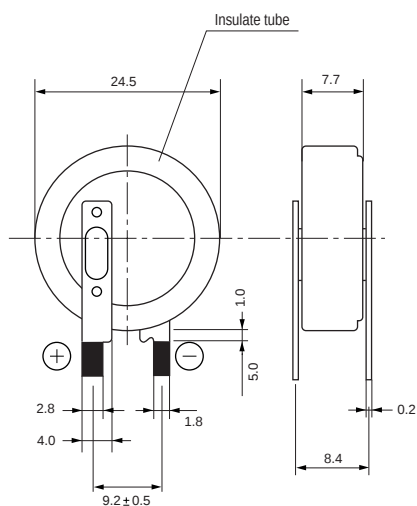
BR,CR2330
/1VC/1VB
Fig No.25



CR2354
/1VC/1VB
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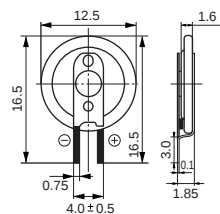


CR2477
/1VC/1VB
Fig No.27



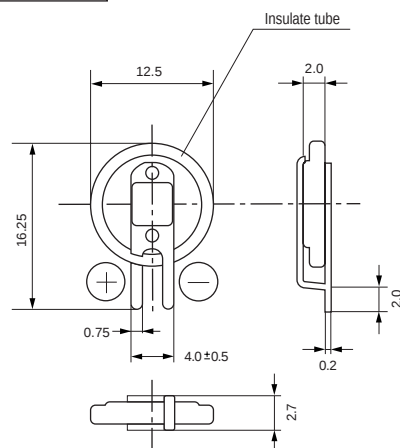
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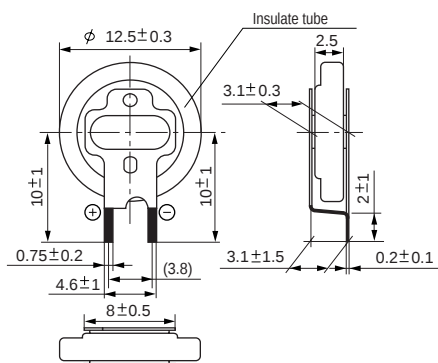
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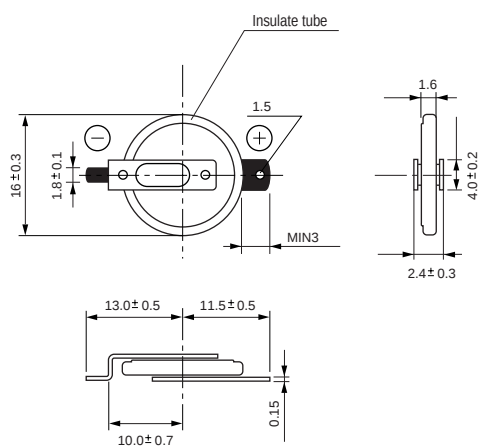
BR1225/F1A

Fig No.30



CR1616/1F2

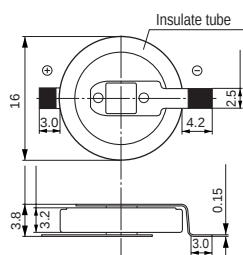
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BR,CR1632

/1F2

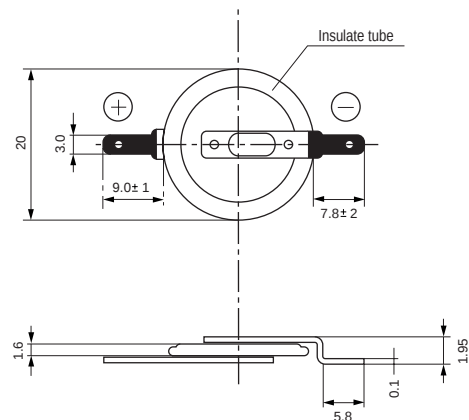
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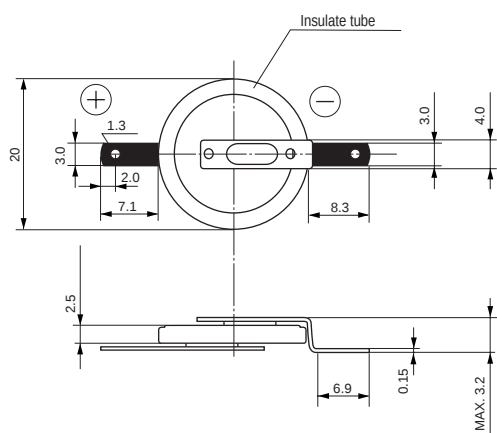
BR,CR2016

/1F2

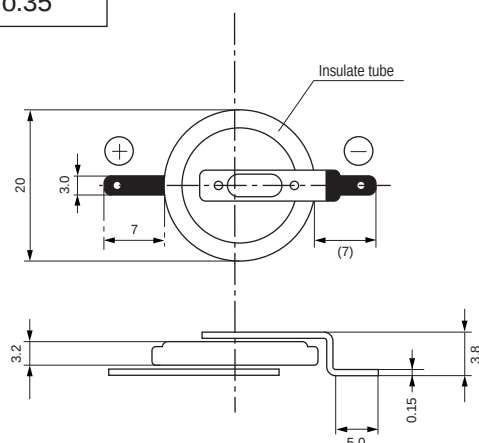
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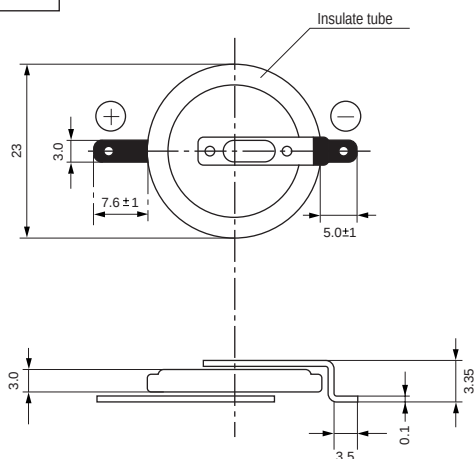
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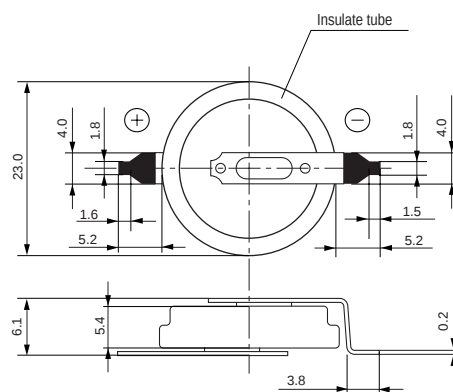
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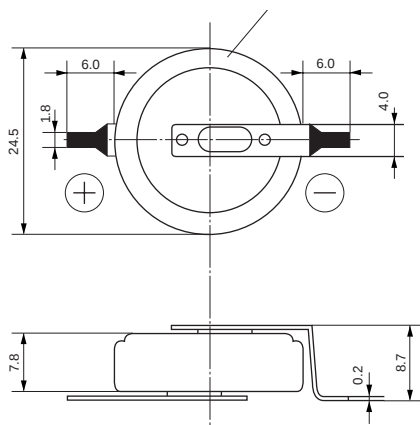
BR,CR2330
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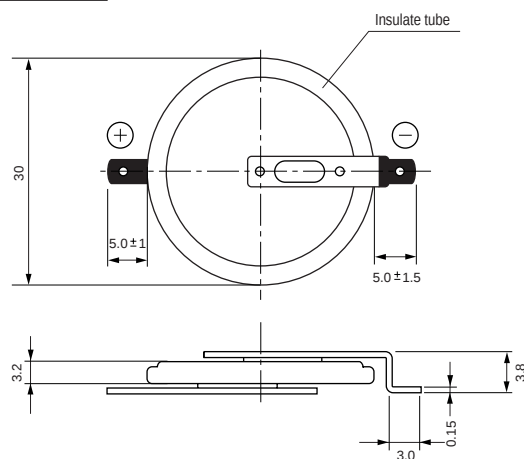
CR2354/1F2
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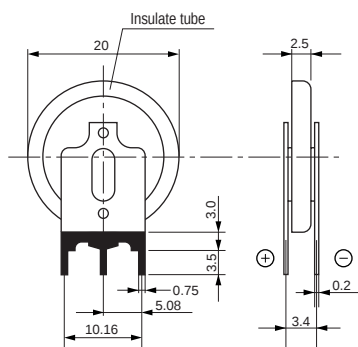
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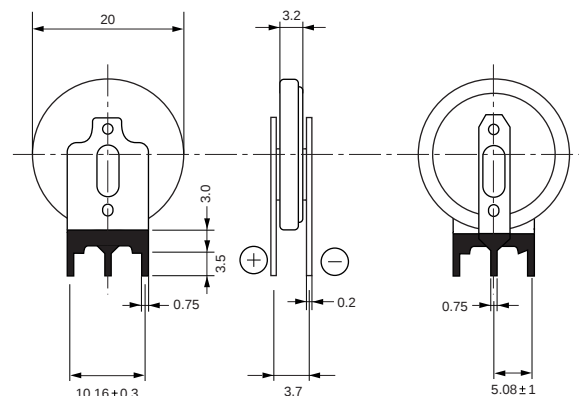
BR,CR3032
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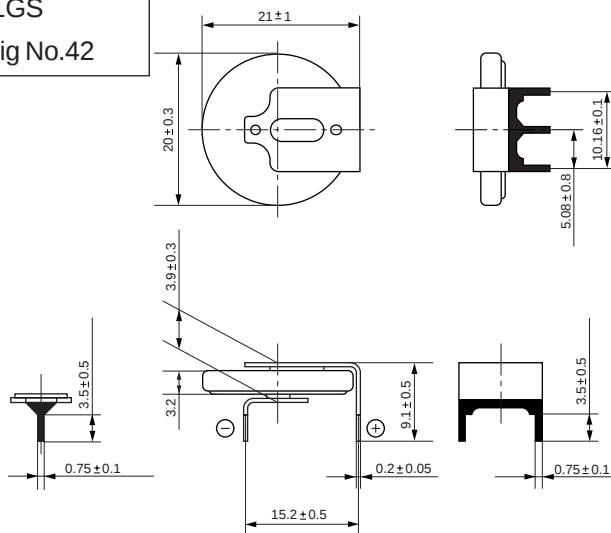
CR2025/1GVF
Fig No.40



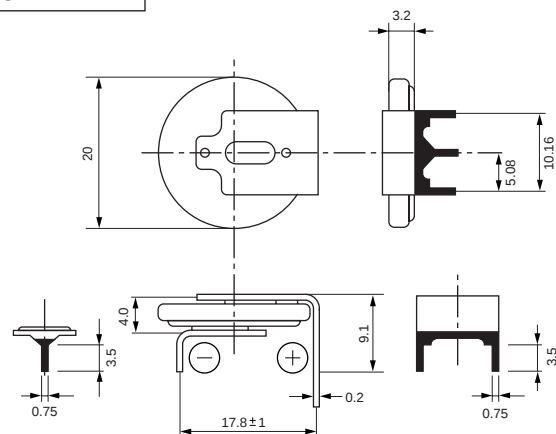
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Fig No.41



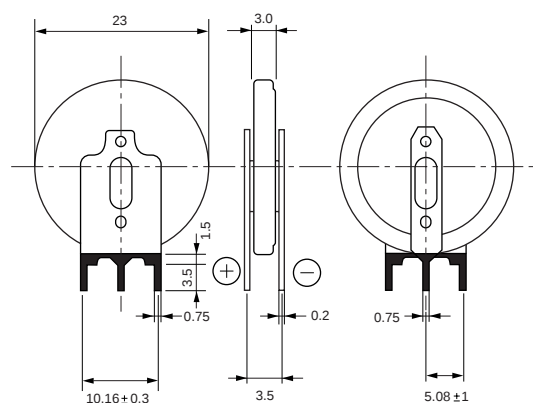
BR,CR2032
/1GS
Fig No.42



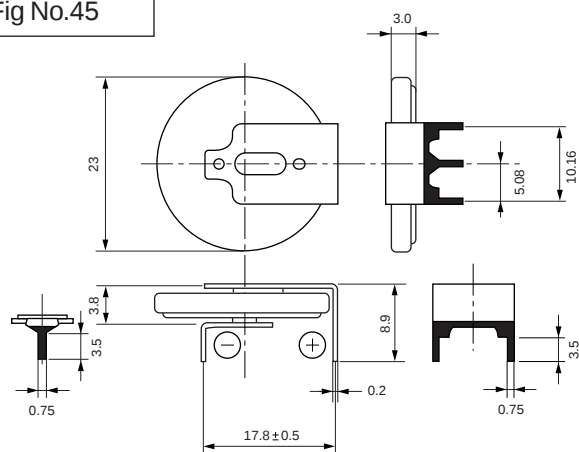
BR,CR2032
/1GUF/1GU
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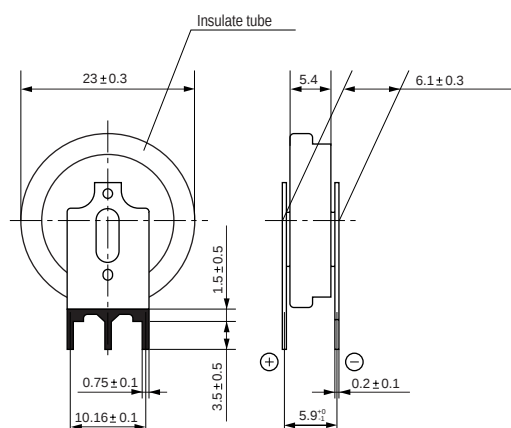
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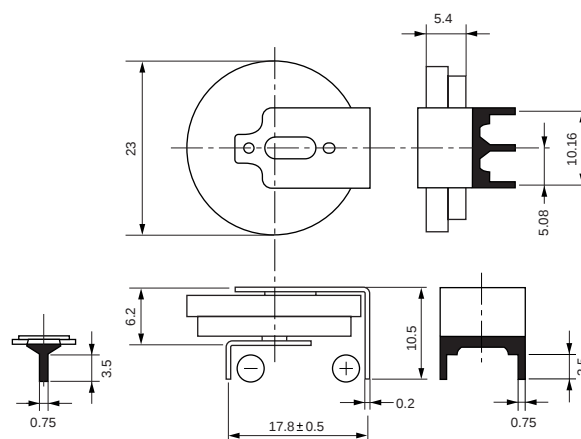
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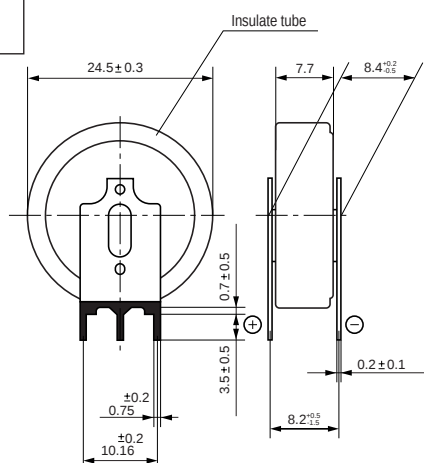
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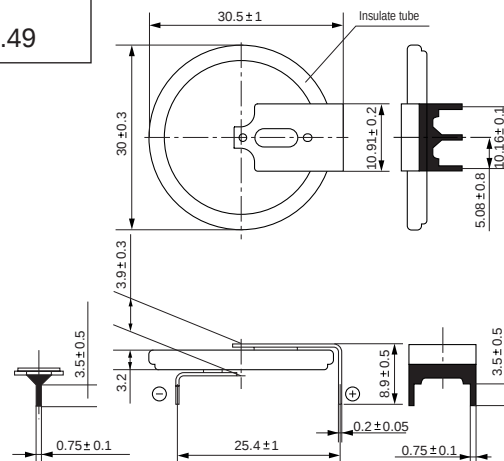
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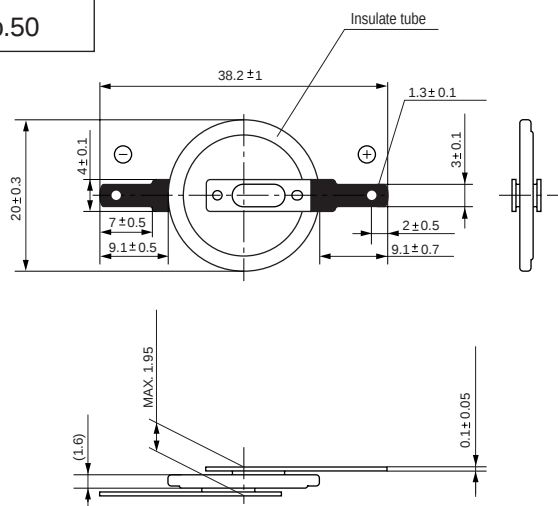
CR2477
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Fig No.48



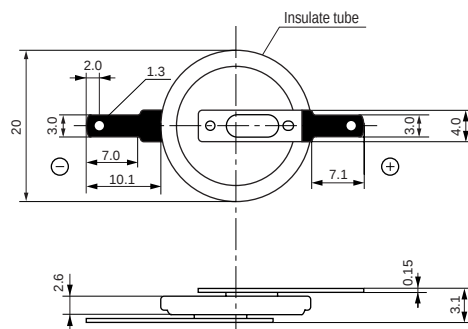
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/1GUF
Fig No.49



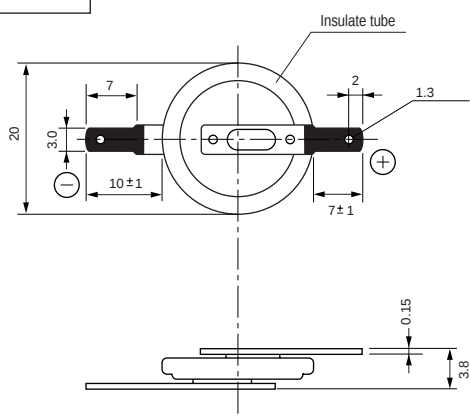
BR,CR2016
/1T2
Fig No.50



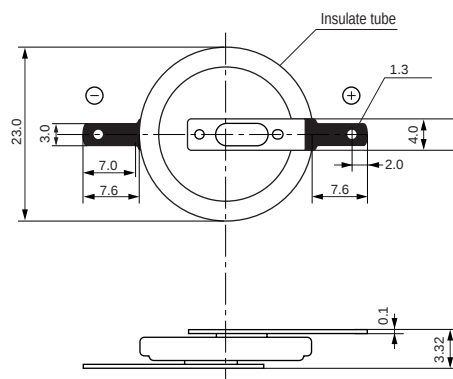
CR2025/1T2
Fig No.51



BR,CR2032
/1T2
Fig No.52



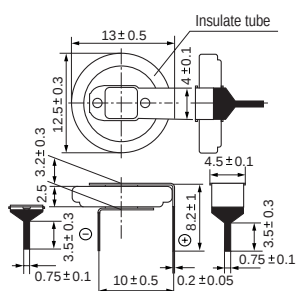
BR,CR2330
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Fig No.53



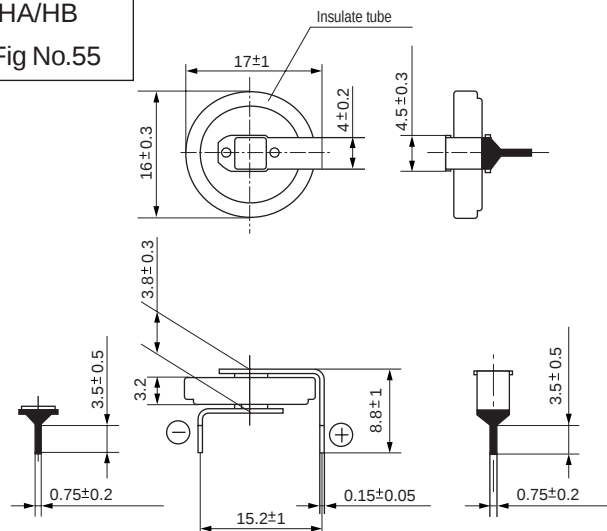
■Coin Type Lithium Batteries (High Operating Temperature Poly-carbonmonofluoride(BR-A) series)

Type	Model Number	Insulate tube		Specifications		Page/Fig No.
		With	Without	Nominal Voltage(V)	Nominal Capacity(mAh)	
H	BR1225A	/HB	/HA	3	48	18/No.54
	BR1632A	/HA	/HB	3	120	18/No.55
	BR2330A	/HA	/HB	3	255	18/No.56
	BR2477A	/HB	/HC	3	1,000	18/No.57
V	BR1632A	/VA		3	120	19/No.58
	BR2330A	/VA		3	255	19/No.59
	BR2477A	/VA		3	1,000	19/No.60
F	BR1225A	/FA		3	48	20/No.61
	BR1632A	/FA		3	120	20/No.62
	BR2330A	/FA		3	255	20/No.63
	BR2477A	/FB		3	1,000	20/No.64
G	BR1632A		/GA	3	120	21/No.65
	BR2330A	/GC	/GA	3	255	21/No.66
	BR2330A	/GD		3	255	21/No.67
	BR2477A	/GB		3	1,000	21/No.68

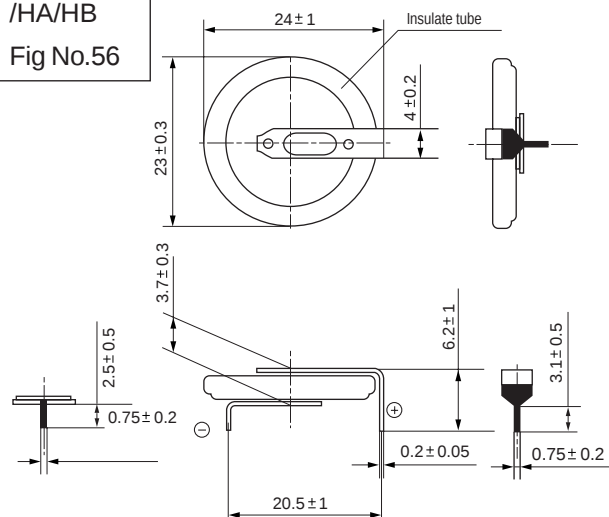
BR1225A
/HB/HA
Fig No.54



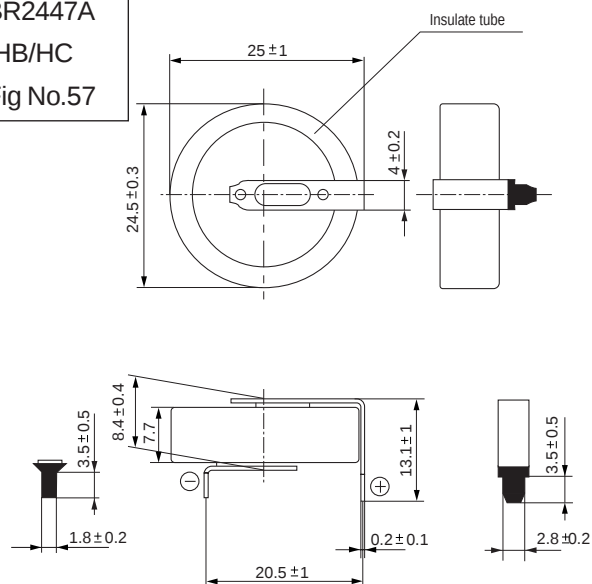
BR1632A
/HA/HB
Fig No.55



BR2330A
/HA/HB
Fig No.56

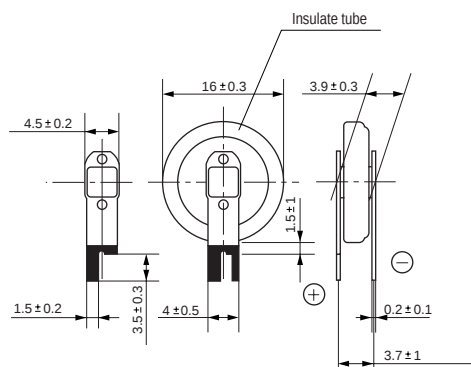


BR2447A
/HB/HC
Fig No.57



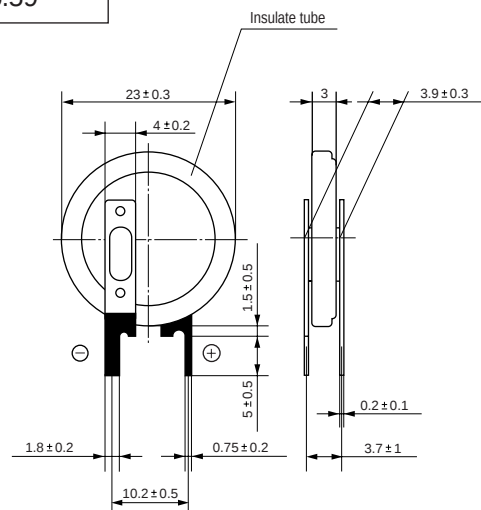
BR1632A/VA

Fig No.58



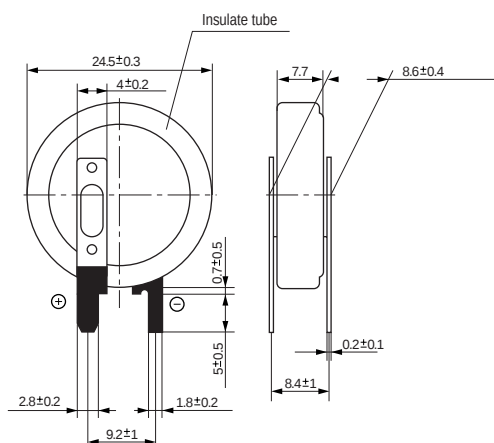
BR2330A/VA

Fig No.59



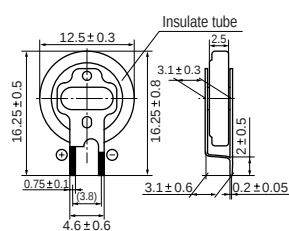
BR2477A/VA

Fig No.60



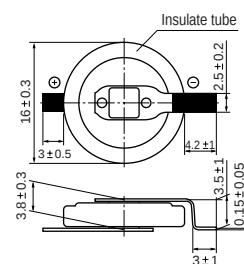
BR1225A/FA

Fig No.61



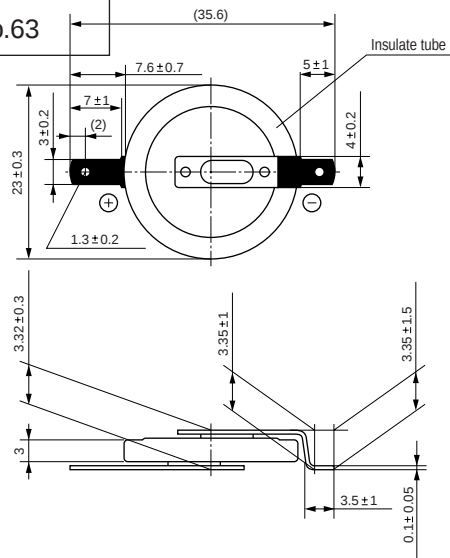
BR1632A/FA

Fig No.62



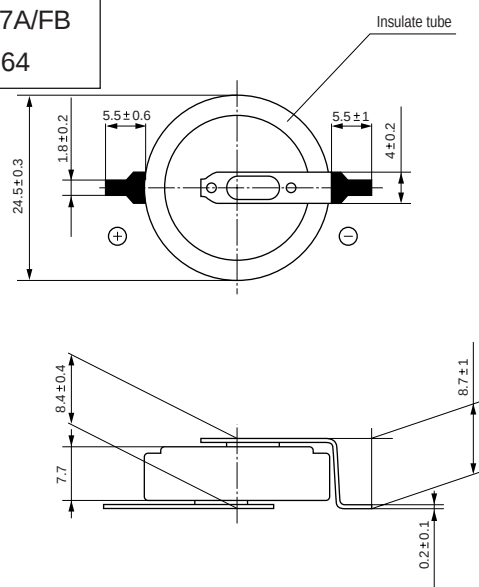
BR2330A/FA

Fig No.63

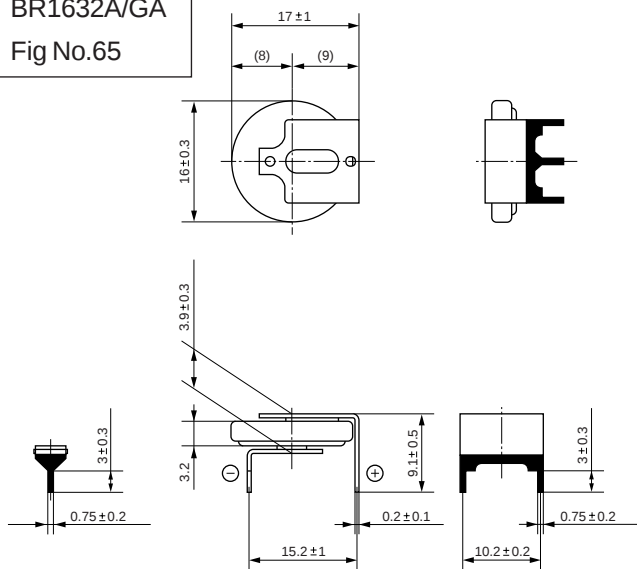


BR2477A/FB

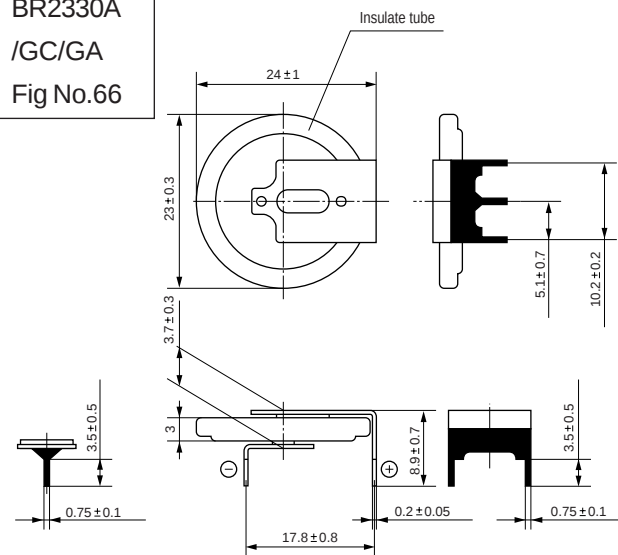
Fig No.64



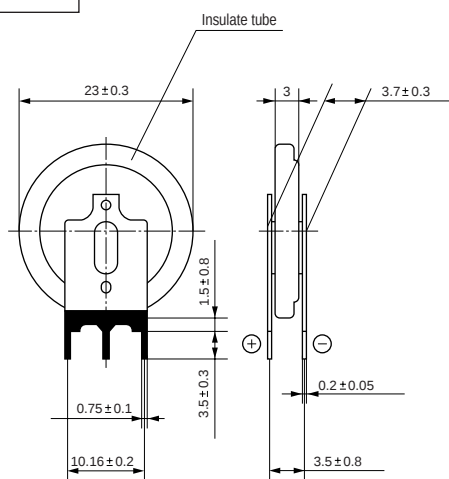
BR1632A/GA
Fig No.65



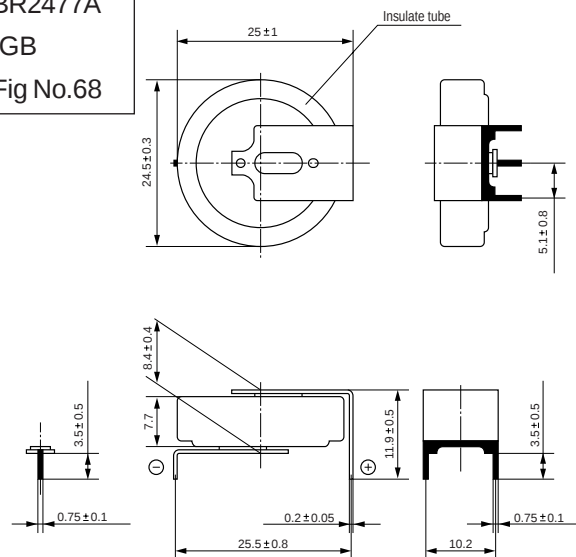
BR2330A
/GC/GA
Fig No.66



BR2330A/GD
Fig No.67



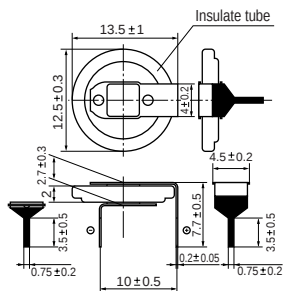
BR2477A
/GB
Fig No.68



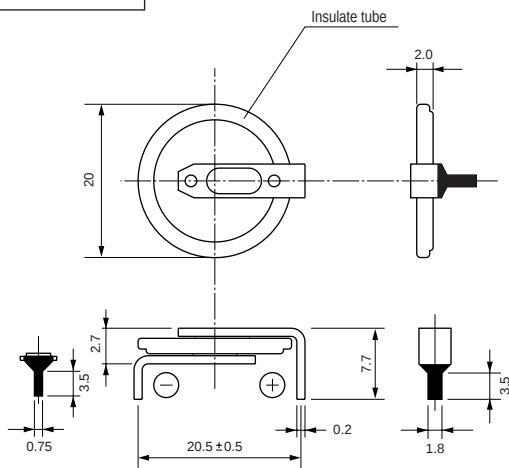
■Vanadium Lithium (VL series) Rechargeable Batteries

Type	Model Number	Insulate tube		Specifications		Page/Fig No.
		With	Without	Nominal Voltage(V)	Nominal Capacity(mAh)	
H	VL1220	/1HF	/1HE	3	7	24/No.69
	VL2020	/1HF		3	20	24/No.70
	VL2320	/1HF		3	30	24/No.71
	VL2330	/1HF		3	50	24/No.72
	VL3032	/1HF5		3	100	24/No.73
V	VL1220	/1VC	/1VB	3	7	25/No.74
	VL2020	/1VC		3	20	25/No.75
	VL2320	/1VC		3	30	25/No.76
	VL2330	/1VC		3	50	25/No.77
F	VL621		/F9D	3	1.5	26/No.78
	VL1216		/1F5U	3	5.0	26/No.79
	VL1220	/1FC		3	7.0	26/No.80
	VL2020	/1F2		3	20	26/No.81
	VL2320	/1F2		3	30	26/No.82
	VL2330	/1F3		3	50	26/No.83
	VL3032	/1F2		3	100	27/No.84
G	VL2020	/1GU7		3	20	27/No.85
	VL3032	/1GUF		3	100	27/No.86
Connector	VL2330	/1S22		3	50	27/No.87
	VL2330	/2S22		6	50	27/No.88

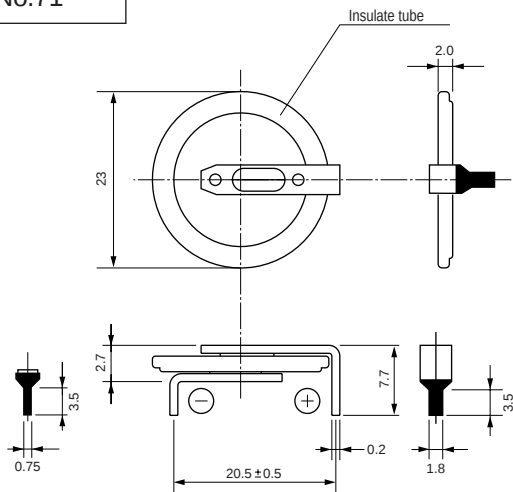
VL1220
/1HF/1HE
Fig No.69



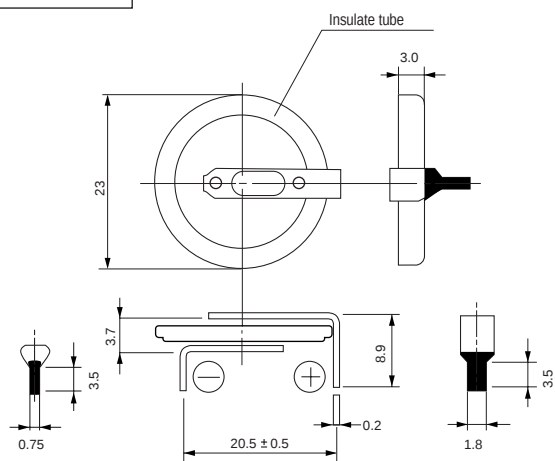
VL2020/1HF
Fig No.70



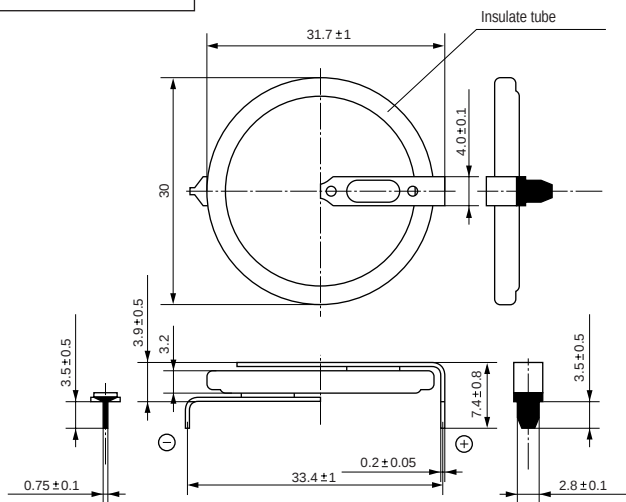
VL2320/1HF
Fig No.71



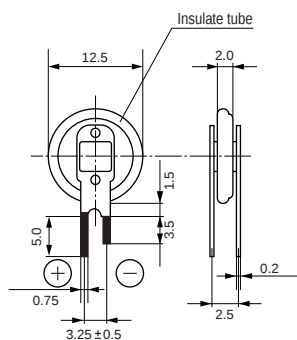
VL2330/1HF
Fig No.72



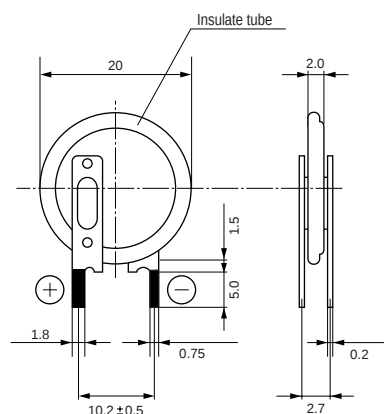
VL3032/1HF5
Fig No.73



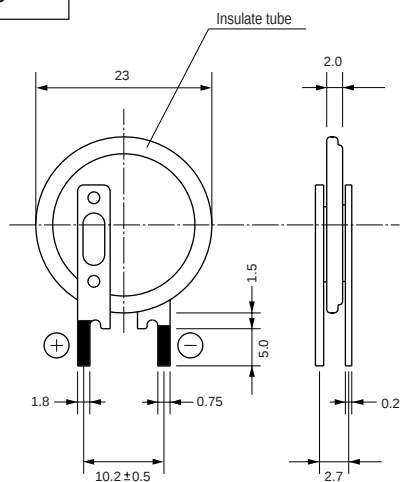
VL1220
/1VC/1VB
Fig No.74



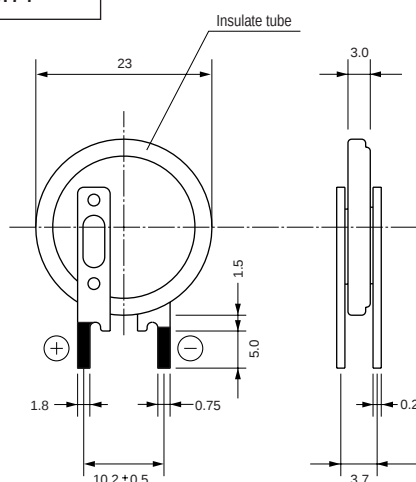
VL2020/1VC
Fig No.75



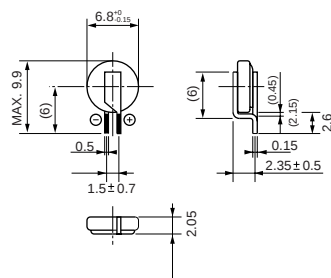
VL2320/1VC
Fig No.76



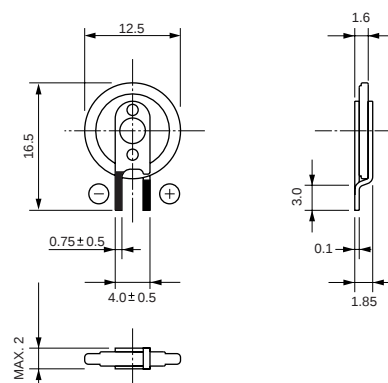
VL2330/1VC
Fig No.77



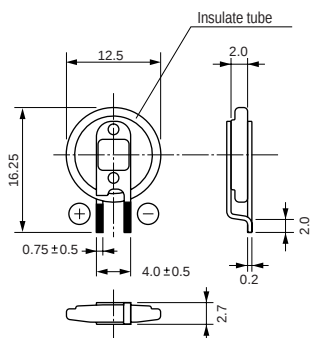
VL621/F9D
Fig No.78



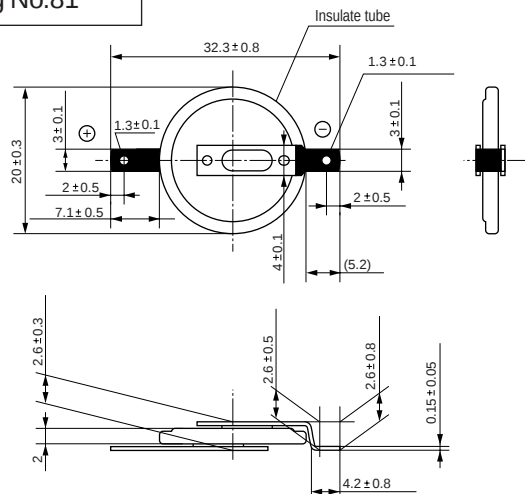
VL1216/1F5U
Fig No.79



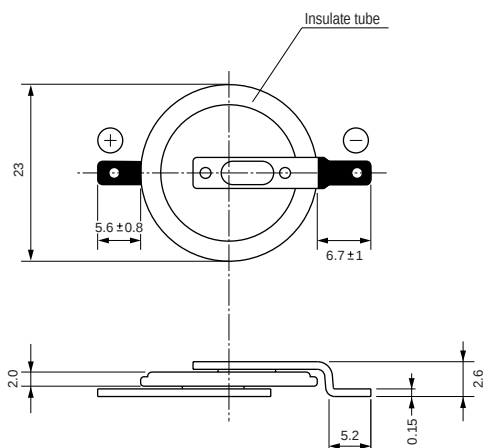
VL1220/1FC
Fig No.80



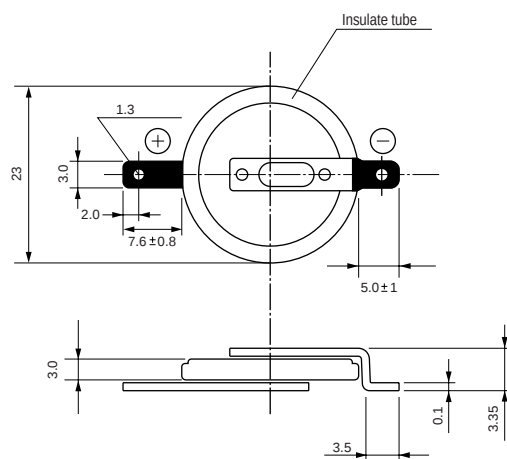
VL2020/1F2
Fig No.81



VL2320/1F2
Fig No.82



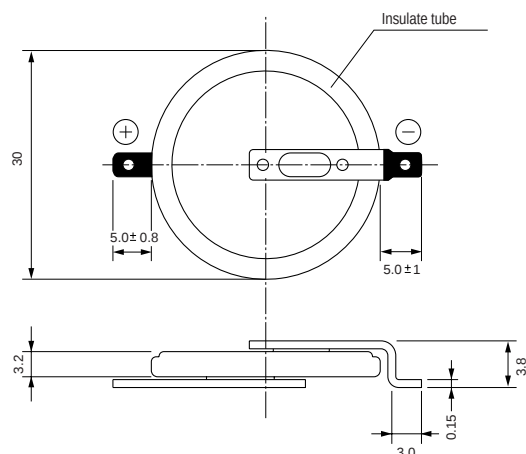
VL2330/1F3
Fig No.83



VL3032/1F2

F Type

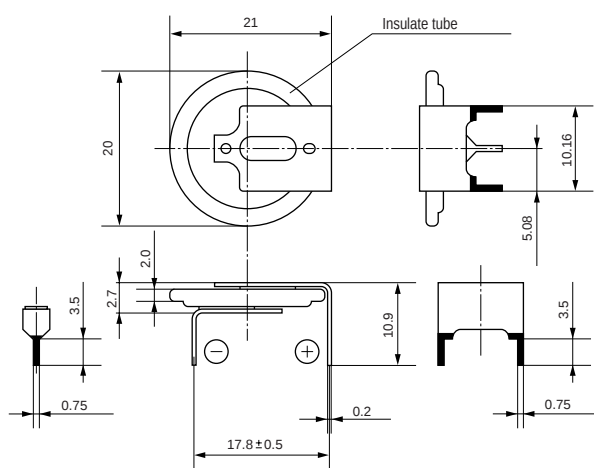
Fig No.84



VL2020/1GU7

G Type

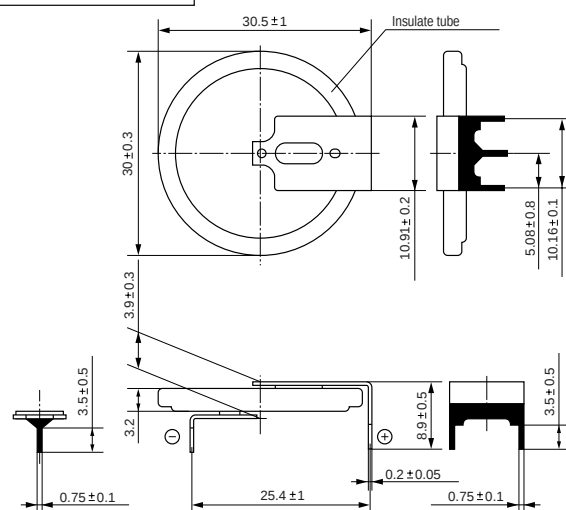
Fig No.85



VL3032/1GUF

G Type

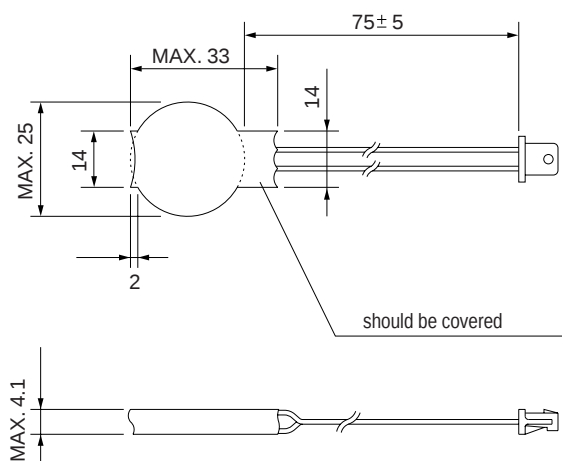
Fig No.86



VL2330/1S22

Connector

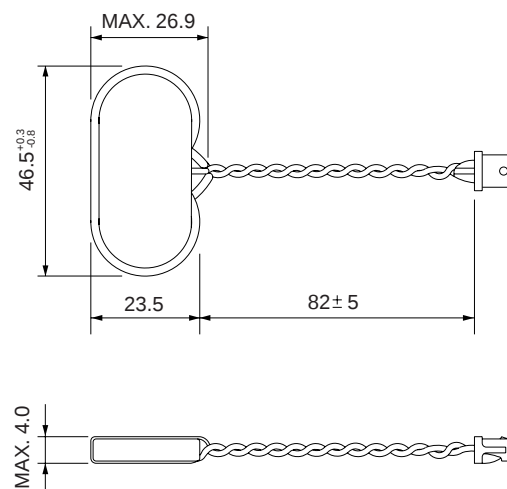
Fig No.87



VL2330/2S22

Connector

Fig No.88

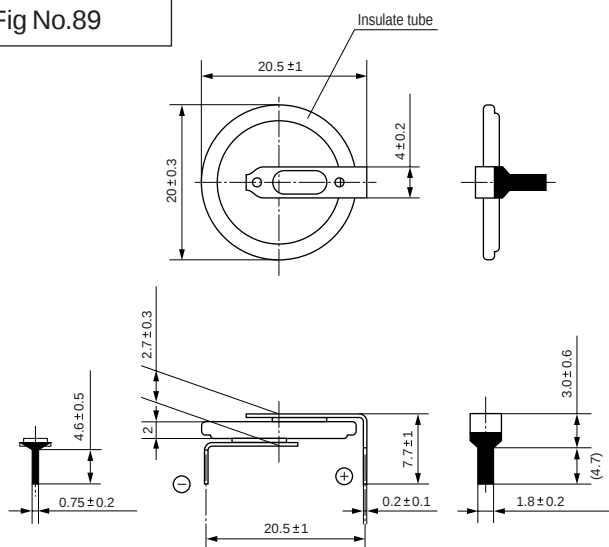


■Manganese Lithium (ML series) Rechargeable Batteries

Type	Model Number	Insulate tube With / Without	Specifications		Page/Fig No.
			Nominal Voltage(V)	Nominal Capacity(mAh)	
H	ML2020	/H1B	3	45	30/No.89
	ML2020	/H1C	3	45	30/No.90
V	ML621S	/V9A	3	5	30/No.91
	ML1220	/V1A	3	17	30/No.92
	ML2020	/V1A	3	45	30/No.93
F	ML414S	/F9D (Under development)	3	1.3	31/No.94
	ML612S	/F9D	3	2.6	31/No.95
	ML612S	/FDD	3	2.6	31/No.96
	ML614S	/F9F	3	3.4	31/No.97
	ML614S	/F9D	3	3.4	31/No.98
	ML616S	/F9D	3	2.9	31/No.99
	ML616S	/FDD	3	2.9	32/No.100
	ML621S	/F9D	3	5	32/No.101
	ML621S	/FDD	3	5	32/No.102
	ML920S	/F9D	3	11	32/No.103
	ML920S	/F9F	3	11	32/No.104
	ML1220	/F1A	3	17	32/No.105
	ML1220	/F1B	3	17	33/No.106
	ML2020	/G1A	3	45	33/No.107
G	ML2020	/G1A	3	45	33/No.107

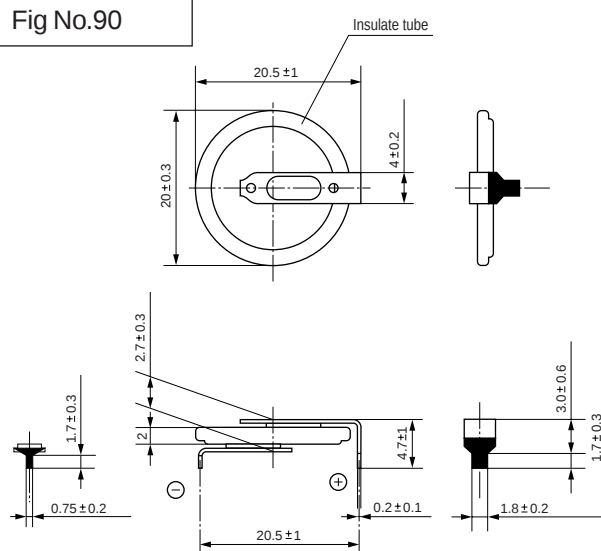
ML2020/H1B
Fig No.89

H Type



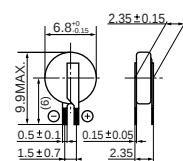
ML2020/H1C
Fig No.90

H Type



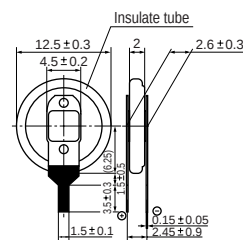
ML621S/V9A
Fig No.91

V Type



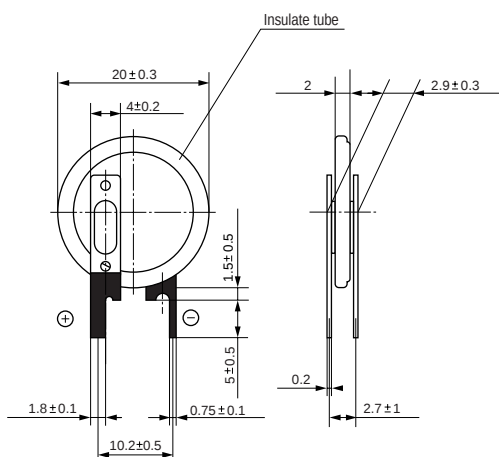
ML1220/V1A
Fig No.92

V Type



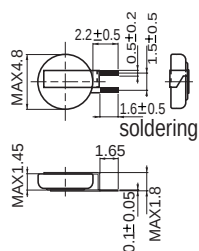
ML2020/V1A
Fig No.93

V Type



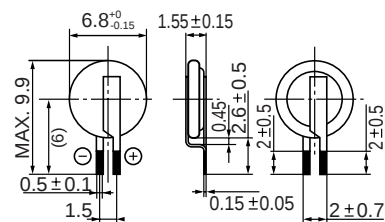
ML414S/F9D

Fig No.94



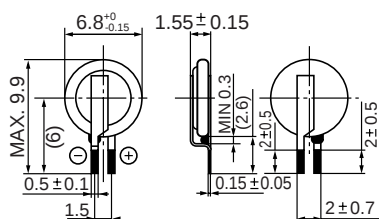
ML612S/F9D

Fig No.95



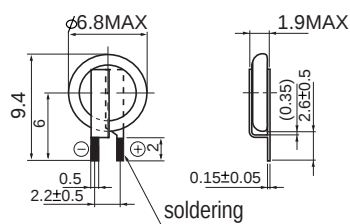
ML612S/FDD

Fig No.96



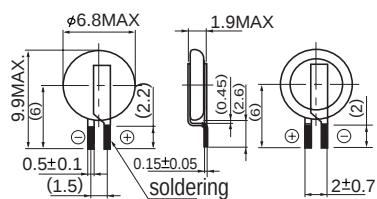
ML614S/F9F

Fig No.97



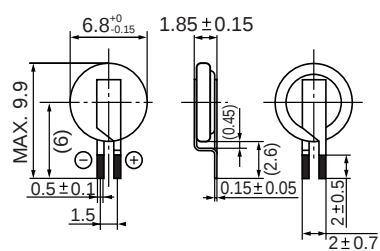
ML614S/F9D

Fig No.98

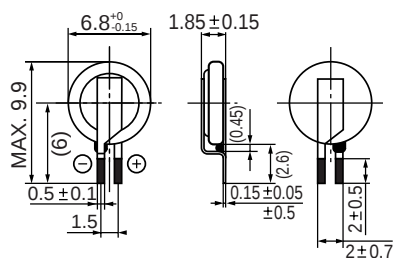


ML616S/F9D

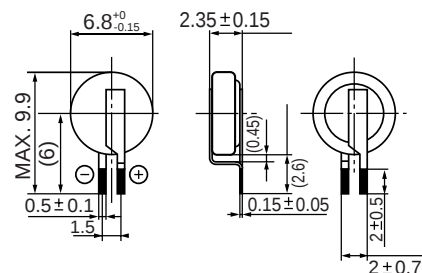
Fig No.99



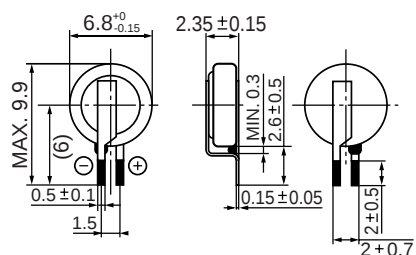
ML616S/FDD
Fig No.100



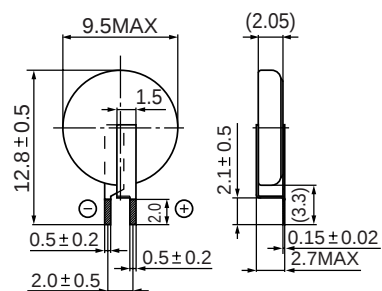
ML621S/F9D
Fig No.101



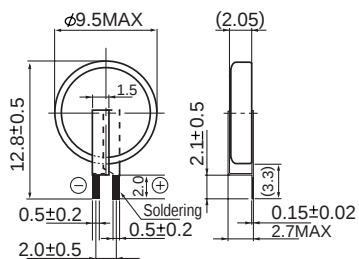
ML621S/FDD
Fig No.102



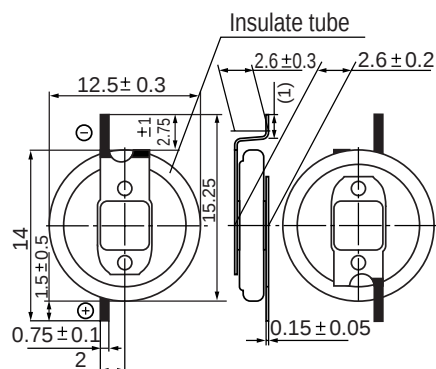
ML920S/F9D
Fig No.103



ML920S/F9F
Fig No.104



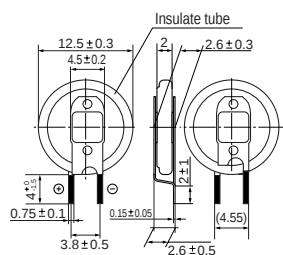
ML1220/F1A
Fig No.105



ML1220/F1B

Fig No.106

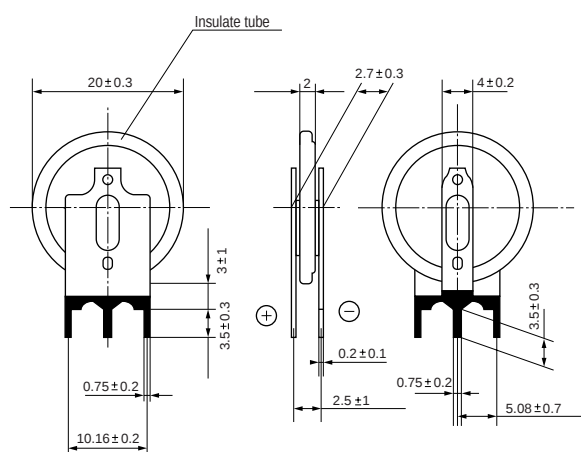
F Type



ML2020/G1A

Fig No.107

G Type



For more details, please contact :

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